IN THE CLAIMS

Please cancel claims 6 and 7, amend claims 1-5, 8, 9, 11, 12, 18, 26 and 47-50, and add new claims 65 and 66 as follows:

1. (CURRENTLY AMENDED) Substantially purified DNA comprising DNA encoding an amino acid sequence selected from the group consisting of the amino acid sequence of:

(i) Streptococcus Pyogenes DNase B enzyme as shown in Figure 4 which includes at its amino terminus an arginine (R) residue derived from a leader peptide (SEQ ID NO: 9), the leader peptide having the amino sequence shown in SEQ ID NO: 1; and

(ii) Streptococcus Pyogenes DNase B enzyme as shown in Figure 4 which does not include at its amino terminus an arginine (R) residue derived from a leader peptide (residues 2- 229 of SEQ ID NO: 9), the leader peptide having the amino acid sequence shown in SEQ ID NO: 1

~~Streptococcus pyogenes DNase B enzyme as shown in Figure 4; and (ii) a sequence encoding a functional equivalent of S. pyogenes DNase B enzyme, the DNA being substantially free of DNA that does not encode the amino acid sequence of Figure 4 or a functional equivalent of S. pyogenes DNase B enzyme except for a leader peptide fused to the amino terminus of S. pyogenes DNase B enzyme.~~

2. (CURRENTLY AMENDED) The DNA of claim 1 wherein the DNA further comprises a DNA sequence encoding the leader peptide having the amino acid sequence shown in SEQ ID NO: 1 ~~fused to the amino terminus of S. pyogenes DNase B enzyme~~.

3. (CURRENTLY AMENDED) The DNA of claim 1 having the nucleotide sequence of Figure 3 (SEQ ID NO: 7).

4. (CURRENTLY AMENDED) ~~An expression~~ vector ~~for Streptococcus pyogenes DNase B enzyme~~ comprising the DNA sequence of claim 1 ~~operatively linked to a least one control sequence compatible with a suitable bacterial host cell~~.

5. (CURRENTLY AMENDED) An expression vector for ~~Streptococcus pyogenes~~ DNase B enzyme comprising the DNA sequence of claim [[3]] 1 operatively linked to at least one control sequence compatible with a suitable bacterial host cell.

6. (CANCELLED)

7. (CANCELLED)

8. (CURRENTLY AMENDED) A bacterial host cell transformed with the expression vector of claim [[4]] 5 in a manner allowing the transformed bacterial host cell to express the ~~Streptococcus pyogenes~~ Streptococcus pyogenes DNase B encoded by the DNA incorporated within the expression vector of claim [[4]] 5 in a detectable quantity.

9. (CURRENTLY AMENDED) A bacterial host cell transformed with the expression vector of claim 5 in a manner allowing the transformed bacterial host cell to express the ~~Streptococcus pyogenes~~ Streptococcus pyogenes DNase B encoded by the DNA incorporated within the expression vector of claim 5 in a detectable quantity, and wherein DNA comprises the nucleotide sequence of Figure 3 (SEQ ID NO: 7).

10. (CANCELLED)

11. (CURRENTLY AMENDED) A process for producing substantially purified ~~Streptococcus pyogenes~~ Streptococcus pyogenes DNase B enzyme comprising:

(a) culturing the bacterial host cell of claim 8;

(b) using the cultured bacterial host cell to express the DNase B enzyme; and

(c) purifying the enzyme from the cultured bacterial host cell.

12. (CURRENTLY AMENDED) A process for producing substantially purified ~~Streptococcus pyogenes~~ Streptococcus pyogenes DNase B enzyme comprising:

(a) culturing the bacterial host cell of claim 9;

(b) using the cultured bacterial host cell to express the DNase B enzyme; and

(c) purifying the enzyme from the cultured bacterial host cell.

13-17. (CANCELLED)

18. (CURRENTLY AMENDED) A transcriptional fusion comprising at least a portion of the ~~S. pyogenes~~ Streptococcus pyogenes DNase B DNA sequence of claim [[3]] 1 fused with another gene, with the fusion having a detectable property altered from the property of the sequence of claim [[3]] 1.

19-25. (CANCELLED)

26. (CURRENTLY AMENDED) A single-stranded nucleic acid probe hybridizing with all nucleotides in the full length DNA sequence coding for the amino-terminal 23 amino acids of the ~~Streptococcus pyogenes~~ Streptococcus pyogenes DNAse B enzyme, not including any portion of the leader sequence thereof, with no greater than about a 30% mismatch over the full length DNA sequence coding for the amino-terminal 23 amino acids.

27-46. (CANCELLED)

47. (CURRENTLY AMENDED) A method of using a promoter of Figure 7 (SEQ ID NO: 10) originally associated with the ~~S. pyogenes~~ Streptococcus pyogenes DNase B gene to express a protein other than DNase B comprising:

(a) separating the promoter originally associated with the ~~S. pyogenes~~ Streptococcus pyogenes DNase B gene from the ~~S. pyogenes~~ Streptococcus pyogenes DNase B gene;

(b) operatively linking the promoter with a structural gene for a ~~S. pyogenes~~ Streptococcus pyogenes protein other than the gene for DNase B; and

(c) expressing the protein encoded by the structural gene.

48. (CURRENTLY AMENDED) The method of claim 47 wherein the protein is expressed in ~~S. pyogenes~~ Streptococcus pyogenes.

49. (CURRENTLY AMENDED) The method of claim 48 wherein the protein is expressed in a prokaryote other than ~~S. pyogenes~~ Streptococcus pyogenes.

50. (CURRENTLY AMENDED) A substantially purified promoter sequence ~~derived~~ obtained from a promoter sequence of Figure 7 (SEQ ID NO: 10) originally associated with ~~S. pyogenes~~ Streptococcus pyogenes DNase B including therein a start site for transcription ~~and sites homologous to the consensus -10 and -35 sites of bacterial promoters~~.

51-63. (CANCELLED)

64. (PREVIOUSLY PRESENTED) An isolated polynucleotide consisting of a nucleotide sequence encoding the amino acid sequence indicated in Figure 4, SEQ ID NO: 9.

–65. (NEW) The DNA of claim 1 wherein the DNA encodes a Streptococcus Pyogenes DNase B enzyme as shown in Figure 4 which includes at its amino terminus an arginine (R) residue derived from a leader peptide (SEQ ID NO: 9), the leader peptide having the amino sequence shown in SEQ ID NO: 1.

–66. (NEW) The DNA of claim 1 wherein the DNA encodes a Streptococcus Pyogenes DNase B enzyme as shown in Figure 4 which does not include at its amino terminus an arginine (R) residue derived from a leader peptide (residues 2- 229 of SEQ ID NO: 9), the leader peptide having the amino acid sequence shown in SEQ ID NO: 1.